The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	09/461,537B
Source:	1FW16
Date Processed by STIC:	11/5/04

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/461,537B

DATE: 11/05/2004 TIME: 10:31:39

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             Royer, John C
              Moyer, Donna L
              Yoder, Wendy T
              Shuster, Jeffrey R
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Expression
    10
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    15 <141> CURRENT FILING DATE: 1999-12-15
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DATE: 11/05/2004 PATENT APPLICATION: US/09/461,537B TIME: 10:31:39

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						Con	v-1	77-7	. ד ת	т	T7 7	n 7 -	D	-	- 7	Ala	
109		val	цуз	FIIC	-20	ser	vai	val	Ala		vai	Ата	Pro	ьeu			
		Λlɔ	Dro	Cln	Glu	Tlo	Dro	7 0 0	т1.	-15	al	Q1	ml		-10		
113	nia	лта	FIO	-5	GIU	116	PIO	-1	1	vai	GIY	GIY		Ser	Ala	ser	
	ΔΊа	Glv	Δan	_	Pro	Dha	T10			T10	Com	7 ***	5	~1		5	
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	Trn		Glv	Glv	Ser	T.e.ii		λen	۸la	7 an	The		Т о	mla sa	77.	7.7 -	
121	25	Cyb	Cly	Oly	DCI	30	шец	nan	Ala	ASII	35	val	ьец	1111	Ala		
		Cvs	Val	Ser	Gly		בות	Gln	Cor	C1.,		C1 5	T1.	7	77-	40	
125		015	• • • •		45	- y -	nıα	0111	261	50	FIIE	GIII	TTE	Arg	55	GTĀ	
	Ser	Leu	Ser	Ara	Thr	Ser	Glv	Glv	Tla		Cor	Cox	Ton	0.00		77.0]	
129	201	D.C.	001	60		DCI	Ory	Ory	65	1111	SEI	ser	ьеи	70	ser	Val	
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133	11129	V 44 1	75	110	DCI	- Y -	DCI	80	Mall	Abii	ASII	Asp		Ala	тте	Leu	
	Tars	T.e.11		Thr	Ser	Tlo	Dro		Clar	C111	7 ~~	т1.	85	Ш	7.7	7	
137	275	90	UCI	1111	DCI	116	95	Set	GIY	Gry	ASII	100	GTÀ	Tyr	Ala	Arg	
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141	105	nia	лта	DCI	Gry	110	Asp	FIO	vai	Ата	_	ser	ser	Ala	Thr		
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145	nru	OLY	11.5	Gry	125	1111	per	GIU	Gry		ser	ser	Thr	Pro		Asn	
	Len	T.011	Luc	17a]		۲ <i>1</i> - 1	Dro	т1а	77-7	130	7	3.7 .	em1	~	135		
149	пец	пеа	цуь		Thr	Val	PIO	TTE		ser	Arg	АТа	Thr		Arg	Ala	
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153	GTII	тут	155	TIIT	Ser	AId	тте		ASN	GIN	met	Pne		Ala	Gly	Val	
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	• 41	1150	JC1		Asn	T 11T	มอน	116	GīĀ	нта	۷dl	ser	rrp	στλ	Asn	GTÀ	

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DATE: 11/05/2004 PATENT APPLICATION: US/09/461,537B TIME: 10:31:39

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355 ctc aac atc ccc ggc ggc ggc ggc ggc ggc ggc atc ttc gac gga tgc act ccc 483 356 Leu Asn Ile Pro Gly Gly Gly Val Gly Ile Phe Asp Gly Cys Thr Pro 125 359 cag ttc ggc ggt ctg ccc ggc cag cgc tac ggc gg ggc atc tcg tcc cgc 531 360 Gln Phe Gly Gly Leu Pro Gly Gln Arg Tyr Gly Gly Ile Ser Ser Arg 361 140 145 150 363 aac gag tgc gat cgg ttc cgc gac gcc ctc aag ccc ggc tac tgg tac tgg 579 364 Asn Glu Cys Asp Arg Phe Pro Asp Ala Leu Lys Pro Gly Cys Tyr Trp 365 155 160 160 165 367 cgc ttc gac tgg ttc aag aac gcc gac aat ccg agc ttc agc ttc cgt 368 Arg Phe Asp Trp Phe Lys Asn Ala Asp Asn Pro Ser Phe Ser Phe Arg 369 170 175 185 371 cag gtc cag tgc ca gcc gag ctc gtc gc acc gga tgc cgc cgc acc gga tgc cgc cgc acc gga tgc cgc acc gac gcc gac acc gga tgc cgc acc gac acc gac gcc gac acc acc gac gcc gac acc ac	352	Val	GIn	Ser	Thr	Ser	Thr	Gly	Gly	Asp	Leu	Gly	Ser	Asn	His	Phe	Asp	
156 Leu Asn 11e Pro Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly																120		
125	355	CEC	aac	atc	CCC	ggc	ggc	ggc	gtc	ggc	atc	ttc	gac	gga	tgc	act	CCC	483
359	350	ьeu	ASII	тте	Pro	GLY	GLY	GLy	Val		Ile	Phe	Asp	Gly		Thr	Pro	
Secondaria Sec		cac	++0	aaa		at a	000	~~-	~						135			
140	360	Gln	Dhe	Glv	99t	Lou	Dro	ggc	cag	cgc	tac	ggc	ggc	atc	tcg	tcc	cgc	531
363 aac gag tgc gat cgg ttc ccc gac gcc ctc aag ccc ggc tgc tac tgg 579 364 Asn Glu Cys Asp Arg Phe Pro Asp Ala Leu Lys Pro Gly Cys Tyr Trp 365	361	0111	1110	140	Gry	пец	PIO	GIĀ		Arg	Tyr	сту	GIY		Ser	Ser	Arg	
160		aac	gag		gat.	caa	ttc	CCC		acc	ata	224	aaa	150	+~~	+ ~~		5.7.0
155	364	Asn	Glu	Cvs	Asp	Ara	Phe	Pro	Asn	Δla	T.eu	Luc	Pro	ggc	Crra	Tac	tgg	579
367 cgc ttc gac tgg ttc aag aac gcc gac aat ccg agc ttc agc ttc cgt 627 368 Arg Phe Asp Trp Phe Lys Asn Ala Asp Asn Pro Ser Phe Ser Phe Arg 369 170	365		155	-1 -		5			1100	ma	пец	пуъ		СТУ	Сув	ıyı	rrp	
368 Arg Phe Asp Trp Phe Lys Asn Ala Asp Asn Pro Ser Phe Ser Phe Arg 369 170 175 180 180 185 185 371 cag gtc cag tgc gct gct cgc acc gga tgc cgc dcc ggc dcc dcc tcc tcc agc agc acc 723 375 aac gac ggc gac ttc cct ggc ggc agc agc acc dcc fgc ggc agc acc dcc fgc fac dcc fgc fac dcc	367	cgc	ttc	gac	tgg	ttc	aaq		acc	gac	aat	cca		ttc	age	tta	cat	627
175	368	Arg	Phe	Āsp	Trp	Phe	Lys	Asn	Ala	Asp	Asn	Pro	Ser	Phe	Ser	Phe	Ara	627
371 cag gtc cag tgc cca gcc gag ctc gtc gct cgc acc gga tgc cgc cgc 675 372 Gln Val Gln Cys Pro Ala Glu Leu Val Ala Arg Thr Gly Cys Arg Arg 373	369	170		_	_		175						001	1110	DCI	TITC		
372 Gin Val Gin Cys Pro Ala Glu Leu Val Ala Arg Thr Gly Cys Arg Arg 373	371	cag	gtc	cag	tgc	cca	gcc	gag	ctc	gtc	gct	cqc	acc	qqa	tac	cac	cac	675
190	372	Gln	Val	Gln	Cys	Pro	Ala	Glu	Leu	Val	Āla	Arg	Thr	Gly	Cys	Arq	Arq	0.0
376 Asn Asp Asp Gly Asn Phe Pro Ala Val Gln Ile Pro Ser Ser Ser Thr 377 205 205 210 215 379 age tet ceg gte aac cag cet acc age acc acg acc a	373					190					195					200	_	
377	375	aac -	gac	gac	ggc	aac	ttc	cct	gcc	gtc	cag	atc	CCC	tcc	agc	agc	acc	723
379 age tet ceg gtc aac cag cet acc age acc age acc acg cac age acc age acc acg tec acc tec 771 380 Ser Ser Pro Val Asn Gln Pro Thr Ser Thr Ser Thr Ser Thr Ser Thr Ser 381	376	Asn	Asp	Asp	Gly	Asn	Phe	Pro	Ala	Val	Gln	Ile	Pro	Ser	Ser	Ser	Thr	
380 Ser Ser Pro Val Asn Gln Pro Thr Ser Thr Thr Ser Thr Ser Thr Ser Thr Ser Ser Thr Ser Gln Pro Thr Thr Pro Ser Gly Cys Thr Ser Gly Cys T																		
381 220 225 230 383 acc acc tcg agc ccg cca gtc cag cct acg act ccc agc ggc tgc act 819 384 Thr Thr Ser Ser Pro Pro Val Gln Pro Thr Thr Pro Ser Gly Cys Thr 245 387 gct gag agg tgg gct cag tgc ggc ggc aat ggc tgg agc ggc tgc acc 867 388 Ala Glu Arg Trp Ala Gln Cys Gly Gly Asn Gly Trp Ser Gly Cys Thr 265 391 acc tgc gtc gct ggc agc act tgc acg aag att aat gac tgg tac cat 915 392 Thr Cys Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His 270 275 280 395 cag tgc ctg tagacgcagg gcagcttgag ggccttactg gtggccgcaa 964 396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg 1024	3/9	age	Com	ccg	gtc	aac	cag	cct	acc	agc	acc -	agc	acc	acg	tcc	acc	tcc	771
383 acc acc teg age ceg cea gtc cag cet acg act cec age gge tgc act 384 Thr Thr Ser Ser Pro Pro Val Gln Pro Thr Thr Pro Ser Gly Cys Thr 385	381	ser	ser	220	val	ASI	GIN	Pro		ser	Thr	Ser	Thr		Ser	Thr	Ser	
The Thr Ser Ser Pro Pro Val Gln Pro Thr Thr Pro Ser Gly Cys Thr 240 245 387 get gag agg tgg get cag tge gge gge aat gge tgg age gge tge ace 867 388 Ala Glu Arg Trp Ala Gln Cys Gly Gly Asn Gly Trp Ser Gly Cys Thr 255 260 265 391 acc tge gte get gge age act tge acg aag att aat gac tgg tac cat 392 Thr Cys Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His 270 275 280 395 cag tge etg tagaegeagg geagettgag ggeettactg gtggeegeaa 964 396 Gln Cys Leu 399 cgaaatgaca etcecaatca etgtattagt tettgtacat aatttegtea tecetecagg		acc	acc		200	aaa	aaa	at a		aat								
385 235 240 245 387 get gag agg tgg get cag tge gge gge aat gge tgg age gge tge ace 867 388 Ala Glu Arg Trp Ala Gln Cys Gly Gly Asn Gly Trp Ser Gly Cys Thr 389 250 265 391 acc tge gte get gge age act tge acg aag att aat gac tgg tac cat 915 392 Thr Cys Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His 393 270 275 280 395 cag tge etg tagaegeagg geagettgag ggeettactg gtggeegeaa 964 396 Gln Cys Leu 399 cgaaatgaca etcecaatca etgtattagt tettgtacat aatttegtea tecetecagg 1024	384	Thr	Thr	Ser	Ser	Pro	Pro	yrc Wal	Gla	Dro	Thr.	act	CCC	agc	ggc	tgc	act	819
387 gct gag agg tgg gct cag tgc ggc ggc aat ggc tgg agc ggc tgc acc 388 Ala Glu Arg Trp Ala Gln Cys Gly Gly Asn Gly Trp Ser Gly Cys Thr 389 250 265 391 acc tgc gtc gct ggc agc act tgc acg aag att aat gac tgg tac cat 915 392 Thr Cys Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His 393 270 275 280 395 cag tgc ctg tagacgcagg gcagcttgag ggccttactg gtggccgcaa 964 396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg 1024	385		235	DCI	DCI	110	FIO		GIII	PIO	1111	THE		ser	GIY	Cys	Thr	
388 Ala Glu Arg Trp Ala Gln Cys Gly Gly Asn Gly Trp Ser Gly Cys Thr 389 250 265 391 acc tgc gtc gct ggc agc act tgc acg aag att aat gac tgg tac cat 915 392 Thr Cys Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His 393 270 275 280 395 cag tgc ctg tagacgcagg gcagcttgag ggccttactg gtggccgcaa 964 396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg 1024		act		agg	taa	act.	cad		aac	aac	aat	aaa		300	aaa	taa	200	0.67
255 391 acc tgc gtc gct ggc agc act tgc acg aag att aat gac tgg tac cat 392 Thr Cys Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His 393 270 275 280 395 cag tgc ctg tagacgcagg gcagcttgag ggccttactg gtggccgcaa 964 396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg	388	Ala	Glu	Arq	Trp	Ala	Gln	Cvs	Glv	Glv	Asn	Glv	Trn	Ser	ggc Glw	Cyc	acc Th∞	867
391 acc tgc gtc gct ggc agc act tgc acg aag att aat gac tgg tac cat 392 Thr Cys Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His 393 270 275 280 395 cag tgc ctg tagacgcagg gcagcttgag ggccttactg gtggccgcaa 964 396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg 1024	389	250			-		255	- 1	J-1		11011		111	DCI	Gry	Cys		
Thr Cys Val Ala Gly Ser Thr Cys Thr Lys Ile Asn Asp Trp Tyr His 270 275 280 395 cag tgc ctg tagacgcagg gcagcttgag ggccttactg gtggccgcaa 964 396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg 1024	391	acc	tgc	gtc	gct	qqc	agc	act	tac	acq	aaa		aat	gac	taa	tac	cat	915
393 270 275 280 395 cag tgc ctg tagacgcagg gcagcttgag ggccttactg gtggccgcaa 964 396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg 1024	392	Thr	Cys	Val	Āla	Gly	Ser	Thr	Cys	Thr	Lvs	Ile	Asn	Asp	Trn	Tvr	His	913
395 cag tgc ctg tagacgcagg gcagcttgag ggccttactg gtggccgcaa 964 396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg 1024	393					270			-									
396 Gln Cys Leu 399 cgaaatgaca ctcccaatca ctgtattagt tcttgtacat aatttcgtca tccctccagg 1024	395	cag	tgc	ctg	taga	cgca	gg g	cage	ttga	ig gg		acto	gto	igada	caa			964
	396	Gln	Cys	Leu														
	399	cgaa	atga	ca c	tccc	aatc	a ct	gtat	tagt	tct	tgta	cat	aatt	tcgt	ca t	ccct	ccagq	1024
	401	gatt	gtca	ca t	aaat	gcaa	t ga	ggaa	caat	gag	tac						99	1060

VERIFICATION SUMMARY

DATE: 11/05/2004

PATENT APPLICATION: US/09/461,537B

TIME: 10:31:40

Input Set : A:\4216260 SQ List.txt